



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,154	03/24/2004	Rung-Tsung Lin	LINR3003/EM	6465
23364	7590	05/02/2007	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			LAO, LUN YI	
			ART UNIT	PAPER NUMBER
			2629	
			MAIL DATE	DELIVERY MODE
			05/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/807,154	LIN ET AL.	
	Examiner	Art Unit	
	LUN-YI LAO	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 24 March 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al(6,443,379) in view of Burr et al(7,180,503).

As to claims 1-2 and 5-8, Liu et al teach a wireless mouse device free of a battery(see figure 1) comprising: a mouse(20) having therein a signal generating circuit((signal modulator) to form signals of commands of the mouse, and being integrated to have a power processing circuit(Power Supply Regenerator) and a sensing coil(Transmit/Receive Antenna)(see figures 1, 4; column 2, lines 38-63); a receiver unit(12) connected with a mainframe of a computer, and being integrated to have therein a microprocessor, an alternative signal circuit(Carrier generator, Antenna Driver Amplifier), an emitting/receiving coil(Transmit/Receive Antenna), and being provided for receiving RF signals from the mouse; so that when the mainframe of the computer is activated, the receiver unit(12) generates signals through the alternative signal circuit(Carrier generator, Antenna Driver Amplifier), and the emitting/receiving coil(Transmit/Receive Antenna) emits the signals(see figures 1, 3; column 2, lines 23-

Art Unit: 2629

68; column 3, lines 1-14), the mouse(20) receives harmonic vibrations through the sensing coil, and the power processing circuit(Power Supply Regenerator) makes pressure-multiplication processing for the harmonic vibrations received to make said harmonic vibrations an electric power of internal circuits for driving the mouse(20)(see figures 1, 4; column 2, lines 54).

Liu et al fail to disclose a receive unit for generating high frequency signals.

Burr et al teach a wireless mouse device having a receive unit(20, 40) for generating high frequency signals(see figures 1, 4 and column 5, lines 46-58). It would have been obvious to have modified Liu et al with the teaching of Burr et al, so as to provide a higher power and quality transmitter.

As to claim 2, Liu et al as modified teach the mouse(20) further has a modulation circuit(Signal Modulator)(see figure 4), the receiver unit(12) further has a driving circuit, a signal amplifying demodulation circuit(Antenna Driver Amplifier, Filter Amplifier, Comparator) and a signal processing circuit(microprocessor) to make integration and transmitting of signals(see figures 1 and 3).

As to claim 5, Liu et al teach receiver unit(12) is designed as a style of a mouse pad directly for sliding of the mouse(1)(see figures 1-2).

As to claims 7 and 8, Liu et al teach the wireless mouse device free of a battery having receiver unit is connected with the mainframe(computer) through a signal line, the signal line directly obtain electric power from the mainframe for transmitting signals(see figures 1-2 and column 2, lines 21-37).

3. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Art Unit: 2629

Liu et al(6,443,379) in view of Burr et al(7,180,503) and Helms(5,490,039).

As to claims 9-12, see the discussion of Liu and Burr et al above.

Liu et al as modified fail to disclose a mouse pad is provided in a lower layer of a notebook to be pivotally rotated for accommodating or drawn out.

Helms teaches a mouse pad(113) is provided in a lower layer of a notebook(100) or keyboard(112) to be pivotally rotated for accommodating or drawn out(see figures 1-4; column 5, lines 61-68 and column 6, lines 1-9). It would have been obvious to have modified Liu et al with the teaching of Helms, so as to allow a computer to use a mouse as a pointing device without requiring a separate working space to be provided(see column 2, lines 13-16).

As to claims 10 and 12, Liu et al as modified teach the mouse(20) further has a modulation circuit(Signal Modulator)(see figure 4), the receiver unit(12) further has a driving circuit, a signal amplifying demodulation circuit(Antenna Driver Amplifier, Filter Amplifier, Comparator) and a signal processing circuit(microprocessor) to make integration and transmitting of signals(see figures 1 and 3).

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al(6,443,379) in view of Burr et al(7,180,503) and Henty(7,027,039).

Liu as modified fails to disclose a device an operation mode for changed an operation mode between receive unit a mouse and keyboard and the receiver unit.

Henty teaches disclose a device an operation mode for changed an operation mode between receive unit(14) a mouse(12) and keyboard(10) and the receiver unit(14)(see figures 1A-1B, 2-6, 12-22; abstract; column 4, lines 33-65 and

column 14, lines 41-68). It would have been obvious to have modified Liu as modified with the teaching of Henty, so as to provide more input devices to a user.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chao et al(7,176,907) teaches a batteryless input device.

Loving(6,531,964) teaches a batteryless keyboard.

Mori(US 20040037026) teaches a wireless keypad with no power source.

Yang(WO 2006047953) teaches a wireless mouse without power supply.

Bulai et al(US 20040189246) teaches a system for inductive charging a wireless mouse.

Daiji(JP 2002-149306) teaches a mouse pad member(4) coupled to the hand-held computer.

Liang(6,633,155) teach an inductive power source for a mouse.

Huang(US 20030048254) teach a wireless pointing device can be charged by an induction power device.

Henty(7,006,014) teaches a computer system with passive wireless keyboard.

Huang(US 20030048254) teaches a wireless peripherals charged by electromagnetic induction.

Shimono(JP 2001159948) teaches a batteryless wireless mouse device.

Art Unit: 2629

Noguchi(JP08-16317) teaches a batteryless wireless mouse device.

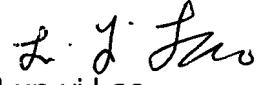
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 28, 2007


Lun-yi Lao
Primary Examiner